

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

A449
R88

UNITED STATES
DEPARTMENT OF AGRICULTURE
LIBRARY



BOOK NUMBER

A449
R88

582192

RURAL ELECTRIFICATION ADMINISTRATION
U. S. Department of Agriculture

November 7, 1960

TEACHING TECHNIQUES IN ADOPTING RESCUE BREATHING
TO POLE-TOP CONDITIONS*

The medical profession has adopted RESCUE BREATHING¹ as the most effective method of resuscitation. Extensive experiments which led to the adoption of this method are shown in the film "Respiratory Resuscitation Techniques"².

It becomes obvious that if electrical utilities choose to adopt this method, radical changes will have to be made in present pole-top resuscitation procedures.

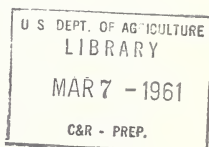
A manikin has been developed that makes it convenient to practice pole-top RESCUE BREATHING. The manikin, shown in Figure 1, has suitable weight and other physical properties for such training procedures. Such a manikin is not a commercially available item, and any electric utility that wishes to acquire one will have to make it. The drawing of Figure 2 gives constructional details. The materials consist of discarded three-inch double jacket rubber lined fire hose and miscellaneous readily obtainable items.

Each lineman should be supplied with an airway such as the Johnson & Johnson Resuscitube or equivalent. For best results, the airway should be modified by attaching a 20 inch length of surgical tubing; the other end of which is fitted with a mouthpiece from a snorkle tube commonly used in skin diving. For sanitary storage, the airway and snorkle should be enclosed in a plastic bag. It should be carried at all times in the lineman's rubber glove case.

For practice purposes, the manikin is taken up the pole and belted off in a collapsed position.

The RESCUE BREATHING procedure is as follows:

1. The lineman serving as a rescuer will climb the pole and make sure all electrical contact with the victim has been cleared.
2. He then will quickly insert the airway in the victim's mouth, properly, and begin breathing for the victim.



* Based on a paper presented by G. E. Tatum, Personnel and Safety Officer, Tacoma Department of Public Utilities.

3. Second rescuer will climb the pole, place the safety line on the victim as was formerly done in pole-top resuscitation, then place the victim astride his safety belt as was also formerly done.
4. Second rescuer will then relieve the first rescuer, who continues his RESCUE BREATHING, by holding the airway in the victim's mouth and pinching his nostrils shut.
5. Second rescuer will then start descending the pole with the victim, using the assistance of the first rescuer who has both hands free because of the convenience of the snorkle tube mouthpiece.
6. The above procedure is continued to the ground where RESCUE BREATHING is continued, if necessary, until the injured workman is in the hospital and receiving doctor's care.

The use of a second rescuer is deemed necessary because the exertion created by walking a man down a pole would make it almost impossible for the man doing so to consistently perform RESCUE BREATHING.

Should an accident occur on steel towers, in manholes, or in other such inconvenient places, the procedure would be similar. However, under these circumstances good use can be made of a standard parachute harness for raising or lowering the victim as the case may be.

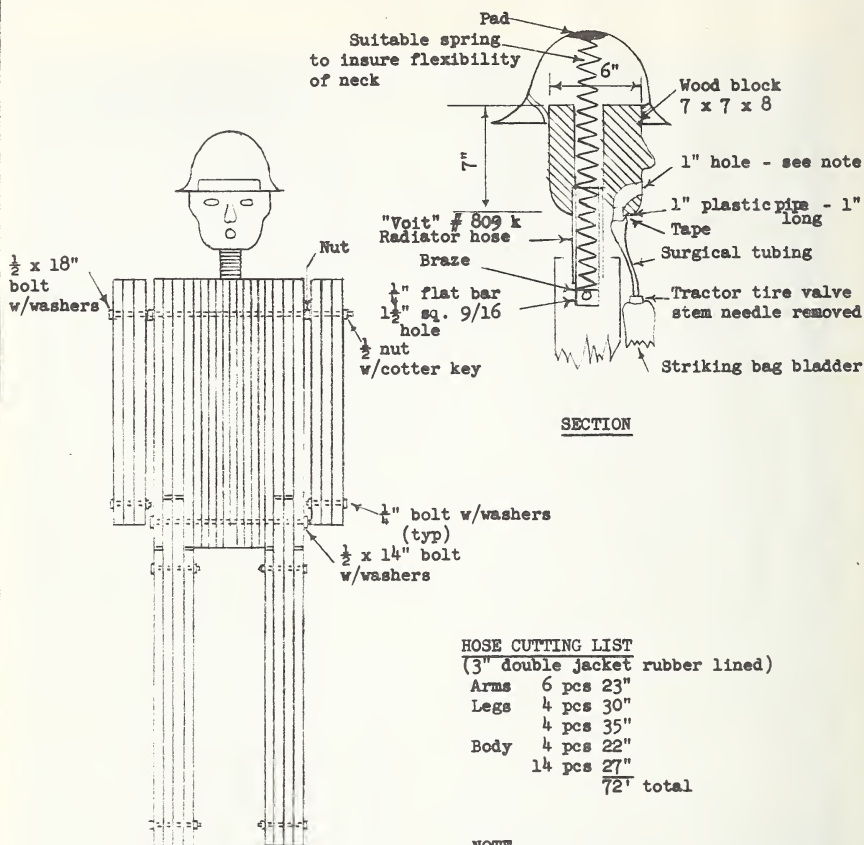
The most important phase of RESCUE BREATHING is that of keeping the victim's chin up and forward. Perhaps the simplest way to describe this is to say that the back of the victim's head should be forced to the back of his neck. Otherwise, there will be no circulation of air or so little that the results would be negligible.

References

1. "Six Steps to Life", p. 20, The Line, March-April 1960, Line Material Industries, McGraw-Edison Company, Milwaukee 1, Wisconsin.
2. "Respiratory Resuscitation Techniques", a film produced by the Walter Reed Army Institute of Research. Available on request from Employers Mutuals of Wausau, 115 W. Wausau Avenue, Wausau, Wisconsin.



Figure 1



HOSE CUTTING LIST

(3" double jacket rubber lined)

Arms	6 pcs 23"
Legs	4 pcs 30"
	4 pcs 35"
Body	4 pcs 22"
	14 pcs 27"
	<u>72" total</u>

NOTE

1. Grind edges of exposed metal.
2. Mouth should be of a size and shape to permit insertion of a "Johnson & Johnson" Resusitube or equal and have it adequately seal to insure inflation of striking bag bladder.

Figure 2

POLE-TOP RESUSCITATION
(Mouth to Mouth)

PRACTICE MANIKIN DETAILS AND LAYOUT

RURAL ELECTRIFICATION ADMINISTRATION

11/1/60

Dwg. No. A-3711

